

type and, adjacent thereto, a second region of the second, opposite, conductivity type a third region of the first conductivity type, which is adjacent the second region and separated from the first region by the second region, and a fourth region of the first conductivity type which is separated from the second region by the third region and which has a higher doping concentration than the third region, the first, the second and the fourth region being provided with a terminal, wherein the third region is provided with a protection zone of the first conductivity type having a higher doping concentration than the third region, which protection zone is separated from the second region by the third region and is situated near the fourth region and around the fourth region, and separated from said fourth region by an intermediate, comparatively high-impedance region, wherein the third region and the fourth region form, respectively, a drift region and a drain region of a Lateral DMOS transistor.

8. (Four Times Amended) A semiconductor device comprising a semiconductor body having a first region of a first conductivity type and, adjacent thereto, a second region of the second, opposite, conductivity type, a third region of the first conductivity type, which is adjacent the second region and separated from the first region by the second region, and a fourth

region of the first conductivity type which is separated from the second region by the third region and which has a higher doping concentration than the third region, the first, the second and the fourth region being provided with a terminal, wherein the third region is provided with a protection zone of the first conductivity type having a higher doping concentration than the third region, which protection zone is separated from the second region by the third region and is situated near the fourth region and around the fourth region, and separated from said fourth region by an intermediate, comparatively high-impedance region, characterized in that the device is of the RESURF type, wherein the product of the thickness and the doping concentration of the third region is approximately  $10^{12}$  atoms per  $\text{cm}^2$ .

#### REMARKS

This application has been carefully reviewed in light of the Office Action dated September 27, 2002. Claims 6, 8, and 9 remain pending in this application. Claims 6 and 8 are the independent claims. Favorable reconsideration is respectfully requested.

On the merits, the Office Action rejected Claims 6, 8, and 9 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the